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Patent

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II. Amendments to the Specification

Please replace the paragraph beginning at the top of Page 6 under "Description of the Preferred Embodiments" and continuing onto Page 7 with the following amended paragraph:

Fig. 2 depicts a vertical cross section of a multiple element bipolar ESD protection device. The starting structure is a p doped substrate 10, typically created on a silicon wafer of 100 crystal orientation and with a doping level in the range of 10¹⁵ atoms per cubic centimeter (a/cm³). A heavily doped n+ first semiconductor layer 12 called a buried layer or subcollector is formed upon the substrate typically using arsenic or antimony as impurity dopants dopents and using either a chemical diffusion or an ion implant process. An ion implant process typically uses an implant energy in the range of 30 KeV with a dosage of 10¹⁵ atoms per square centimeter (a/cm²) to produce a n+ buried layer doping level between 10¹⁸ and 10¹⁹ a/cm³. Next, a light to moderately doped n type epitaxial second semiconductor layer 14 is deposited with a doping level typically in the range of 10¹⁵ to 10¹⁶ a/cm³ with arsenic frequently being used as the dopant dopent source element. A plurality of deep n+ regions 16 are implanted into the second semiconductor layer 14 beneath the collector contact regions 18 typically using either an arsenic, antimony or phosphorous dopant dopent with an implant energy in the range of 30 KeV with a dosage of 10¹⁵ a/cm² to produce an n+ buried layer region doping level between 10¹⁸ and 10¹⁹ a/cm³. This provides a low resistance path to the surface conductor system 34 for the collector current. The structure processing is continued by implanting a third semiconductor layer 24 of p dopant dopent, usually boron, with an implant energy in the range of 30 KeV with a dosage of